

3.4 CULTURAL RESOURCES

This section discusses the cultural resources in the vicinity of the proposed Tucson Electric Power Company (TEP) Sahuarita-Nogales Transmission Line project. The discussion is divided into Section 3.4.1, Archaeological and Historical Sites, and Section 3.4.2, Native American Concerns and traditional cultural properties.

Federal agency responsibilities with regard to cultural resources are addressed by a number of laws, implementing regulations, Executive Orders (EOs), programmatic agreements, and other requirements, including the *National Historic Preservation Act* of 1966 (NHPA), *Native American Graves and Repatriation Act* (NAGPRA), *American Indian Religious Freedom Act* (AIRFA), EO 13007 “Native American Religious Practices,” and EO 13175 “Consultation and Coordination With Indian Tribal Governments.” This protection extends to sites on private land potentially affected by actions requiring Federal approval. The principal Federal law addressing cultural resources is the NHPA, as amended (16 USC 470), with its implementing regulations (36 CFR Part 800). NHPA describes the process for identifying and evaluating historic properties; assessing the effects of Federal actions on historic properties; and consulting to avoid, reduce, or minimize adverse effects. The term “historic properties” refers to cultural resources that meet specific criteria for eligibility for listing on the National Register of Historic Places (NRHP). Section 106 of the NHPA requires that Federal agency decisions affecting these places consider cultural and historic values and the options available to protect these properties. Section 106 also requires consultation with Indian tribes whose traditional lands may be affected by “undertakings,” and EO 13175 delineates the Government-to-Government Relationship between Native American Tribal Governments and Federal agencies through which these consultations must occur. NAGPRA was enacted in 1990 to protect Native American burials, associated funerary objects, and objects of cultural patrimony encountered on Federal land. The AIRFA and EO 13007 both pertain to Native American sacred sites. EO 13007 states that Federal agencies must “to the extent practicable and not clearly inconsistent with essential agency functions, accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites.”

The U.S. Department of Energy (DOE), as the lead Federal agency, is responsible for identifying, evaluating, and assessing effects of construction and operation of the TEP Sahuarita-Nogales Transmission Line proposed project on cultural resources, in concurrence with the State Historic Preservation Officer (SHPO) and other consulting parties. As is common practice, this Draft Environmental Impact Statement (EIS) does not present the exact locations of cultural resources (including historical sites, archaeological sites, and traditional cultural properties) in an effort to help preserve those sites from vandalism. Instead, the descriptions below focus on known densities of sites within the corridors. Throughout this discussion, all federally recognized American Indian political entities consulted in this project are collectively termed the “tribes,” even though many are Nations or Communities. DOE and the cooperating agencies recognize that each tribe is an individual, sovereign nation with a unique trust relationship to the U.S. government.

3.4.1 Archaeological and Historical Sites

DOE and Arizona State Museum personnel conducted record searches at the Arizona State Museum using Arizona Online Database of Archaeological Projects and Sites (AZSITE) in order to determine the number and type of previously documented archaeological and historical sites within the 0.25-mi (0.40-km) study corridor for each alternative. The U.S. Department of Agriculture Forest Service (USFS) provided information on known sites within the study corridors on the Coronado National Forest. DOE determined the degree to which each of the corridors had been previously surveyed for archaeological and historical sites by using AZSITE and data provided by USFS. Three 20th century sites are known to be

crossed by all three of the proposed corridors: the historic alignment of Ruby Road (see Figure 3.1–1), the Potrero erosion control features constructed by the Civilian Conservation Corps (approximately 1.25 mi [2 km] northwest of Nogales), and a water conveyance feature known as the Ruby Pipeline that runs west from the Santa Cruz River through Peck Canyon to the town of Ruby. These three sites are included below in discussions of the total sites documented within the individual proposed corridors. The Atascosa Lookout Tower, an historic property northeast of the Western Corridor in the Atascosa Mountains, is outside the right-of-way (ROW) of the three proposed corridors. Additional sites that have been documented but have yet to be registered with the Arizona State Museum, USFS, or SHPO may also be located within each of the proposed corridors.

3.4.1.1 *Western Corridor*

The Western Corridor would involve the construction of a new transmission line that runs from the South Substation, located on the west bank of the Santa Cruz River in Sahuarita, across the eastern descent of the Sierrita Mountains, eventually passing through the Tumacacori and Atascosa Mountains to the U.S.-Mexico border west of Nogales, Arizona (all locations noted on Figure 1.1–4, unless otherwise noted below).

Twenty-two previously identified archaeological and historical sites have been documented within this corridor, including six sites on the Coronado National Forest. Archaeological terms and site types are defined in the text box that follows. The prehistoric to historic Native American sites include five artifact scatters, two artifact scatters with rock features, one site with potential habitation features, three rock shelters with artifact scatters, one bedrock mortar site, and one pictograph site. Historical sites include two habitation sites, the historic alignment of Ruby Road, Peña Blanca Civilian Conservation Corps Camp F-64-A, a set of erosion control features constructed by the Civilian Conservation Corps, and a water conveyance feature known as the Ruby Pipeline. Additional sites include a multicomponent site containing a prehistoric artifact scatter and a historical ranch, a site consisting of two rock walls of unknown age, and an isolated check dam of unknown age. None of these sites are currently listed in the NRHP; however, all should be considered potentially eligible for listing until further work is done to evaluate their eligibility.

Site density varies directly with the intensity of survey, with greater number of sites located in the areas more intensively surveyed. Fourteen of the 22 known sites are located on the descent of the Sierrita Mountains west of Sahuarita and Green Valley, 2 are located near the intersection of the Western Corridor and Sopori Wash (see Figure 3.7–1), and the remaining 6 are located in the mountainous areas of the Tumacacori and Atascosa Mountains on the Coronado National Forest. Data collected from AZSITE and USFS indicate that less than 15 percent of the Western Corridor has been previously surveyed for cultural resources. The area around Sahuarita and a portion of the eastern descent of the Sierrita Mountains represent the majority of previously surveyed land. Because only a small percentage of the Western Corridor has been previously surveyed for cultural resources, it is extremely likely that additional prehistoric and historic sites exist within it. Based upon the varied terrain of the Western Corridor, a wide range of archaeological site types are expected. Prehistoric and historic habitation sites are commonly located along river and wash corridors, whereas the mountainous segment may contain Native American rock art sites and shrines, as well as Historic Period ranching and mining-related sites. Intermontane valleys (valleys between mountains) are expected to contain a wide variety of prehistoric and historic sites.

Archaeological Terms and Site Types	
Artifact Scatter	Archaeological site resulting from often undetermined past activity, represented only by artifacts on the present ground surface; often, there is little or no depth to the site deposits. These may represent the only visible remains of a long-term habitation site, or, in contrast, a limited activity site (pot break, flint knapping) or agricultural field where miscellaneous artifacts were included in field mulch.
Bedrock Mortar	Place where grinding or crushing of food or other materials took place on a large rock; these are not movable artifacts.
Cave Site	An archaeological site in a cave; the entrance of a cave is generally smaller than the depth into the rock cliff of the cave, as opposed to a rock shelter (see below).
Check Dam	Rocks aligned to form a small dam, constructed in a gully or on a slope, to decrease the water flow velocity and promote deposition of sediment.
Multicomponent Site	An archaeological site that contains the remains of more than one culture and often includes archaeological remains from more than one time period.
Petroglyph	An engraving on a rock produced by grinding, pecking, or incising.
Pictograph	A painting on rock.
Prehistoric	Of or pertaining to the time before written history in a given region.
Protohistoric	Of or pertaining to the time immediately preceding the advent of written documents in a given region. In practice, this is the period of time (from the arrival of Europeans in North America) until the time when written records of the area in question were produced.
Rancheria	A settlement of dispersed, unconnected houses common to historic groups in southern Arizona and California; as opposed to "pueblo," which is a settlement made up of connected, multi-household rooms.
Rock Art	A general term for figures or designs painted or engraved on rock or formed through the placement of boulders.
Rock Feature	A human-made line, ring, cairn, or pile of rocks that could have been used for a number of different purposes in the past, including agricultural and religious uses.
Rock Shelter	A shallow overhang in a rock face, with an "entrance" wider than it is deep. When mentioned in archaeology, the shelter of the rock overhang was generally used by people in the past.
Tinajas	Rock tanks in which rain water collects.

3.4.1.2 *Central Corridor*

The Central Corridor runs from the South Substation, located on the west bank of the Santa Cruz River in Sahuarita, across the eastern descent of the Sierrita Mountains, eventually passing between the Santa Cruz River and the Tumacacori and Atascosa Mountains to the U.S.-Mexico border west of Nogales, Arizona (locations noted on Figure 1.1–4). Most of the Central Corridor would follow or cross an existing El Paso Natural Gas Company (EPNG) pipeline alignment. Three significant historical sites are located near the Central Corridor: Tumacacori National Historical Park (in Tumacacori), Tubac Presidio State Historic Park (in Tubac), and the Juan Bautista de Anza National Historic Trail (immediately adjacent to the Santa Cruz River in the proposed project area).

Six previously identified archaeological and historical sites have been documented within this corridor, including four sites on the Coronado National Forest. The prehistoric to historic Native American sites include one artifact scatter and one partially excavated cave site. Historical sites include the historic alignment of Ruby Road, a set of erosion control features constructed by the Civilian Conservation Corps, and a water conveyance feature known as the Ruby Pipeline. One isolated check dam of unknown age has also been documented within this corridor. Additionally, several historical O’Odham rancherias are known to have existed along the Santa Cruz River south of Tumacacori and may lie within the Central Corridor. None of these sites are currently listed in the NRHP; however, all should be considered potentially eligible for listing until further work is done to evaluate their eligibility.

Site density is low within the Central Corridor probably because very little of the corridor has been intensively surveyed. Two sites have been documented on the eastern descent of the Sierrita Mountains west of Sahuarita and Green Valley. The remaining four documented sites are located on the Coronado National Forest.

Data collected from AZSITE and USFS indicate that less than 15 percent of the Central Corridor has been previously surveyed for cultural resources. The area around Sahuarita and a portion of the eastern descent of the Sierrita Mountains west of Green Valley represent the majority of previously surveyed lands. Because only a small percentage of the Central Corridor has been previously surveyed for cultural resources, it is extremely likely that additional prehistoric and historic sites exist within this corridor. Based upon available data, site density south of Tucson is highest along the Santa Cruz River and along major washes that flow into the Santa Cruz River. These are, however, the areas that have been most intensively surveyed in the past.

3.4.1.3 *Crossover Corridor*

The Crossover Corridor would involve the construction of a new transmission line from the South Substation, located on the west bank of the Santa Cruz River in Sahuarita, across the eastern descent of the Sierrita Mountains, eventually passing through the Tumacacori Mountains (locations noted on Figure 1.1–4). The corridor turns eastward and follows Peck Canyon, located between the Tumacacori and Atascosa Mountains, and turns south again running between the Santa Cruz River and the Atascosa Mountains to the U.S.-Mexico border west of Nogales, Arizona.

Twenty-seven previously identified archaeological and historical sites have been documented within this corridor, including 11 on the Coronado National Forest. The prehistoric to historic Native American sites include seven artifact scatters, two artifact scatters with rock features, one site with potential habitation features, six rock shelters with artifact scatters (three rock shelters contain rock art), one bedrock mortar site, and one partially excavated cave site. Historical sites include two habitation sites, the historic alignment of Ruby Road, a set of erosion control features constructed by the Civilian Conservation Corps, a water conveyance feature known as the Ruby Pipeline, and a stone monument and historical artifact scatter marking the location of the historic Peck’s Ranch. Additional sites include a multi-component site

consisting of a prehistoric artifact scatter and a historical Euro-American ranch, a site consisting of two rock walls of unknown age, and an isolated check dam of unknown age. None of these sites are currently listed in the NRHP; however, all should be considered potentially eligible for listing until further work is done to evaluate their eligibility.

Site density varies directly with the intensity of survey, with greater number of sites located in the areas more intensively surveyed. Fourteen of the 27 known sites are located on the descent of the Sierrita Mountains west of Sahuarita and Green Valley, 2 are located near the intersection of the Crossover Corridor and Sopori Wash, and the remaining 11 are located on the Coronado National Forest. The majority of the sites on the Coronado National Forest are located along Peck Canyon. Data collected from AZSITE indicate that less than 15 percent of the Crossover Corridor has been previously surveyed for cultural resources. The area around Sahuarita and a portion of the eastern descent of the Sierrita Mountains west of Green Valley represent the majority of previously surveyed land. Because only a small percentage of the Crossover Corridor has been previously surveyed for cultural resources, it is extremely likely that additional prehistoric and historic sites exist within the corridor. Based upon the varied terrain of the Crossover Corridor, a wide range of archaeological site types are expected. Prehistoric and historic habitation sites are commonly located along river and wash corridors, whereas the mountainous segment may contain Native American rock art sites and shrines, as well as Historic Period ranching and mining related sites.

3.4.2 Native American Concerns

The proposed project is within the traditional territories of 12 Native American tribes. Four of these tribes are culturally closely related, all speak O’Odham, and work closely together in cultural resources consultation; they are referred to here as the “Four Southern Tribes” and are the Ak-Chin Indian Community, Gila River Indian Community, Salt River Pima-Maricopa Indian Community and the Tohono O’Odham Nation. Culturally, the Four Southern Tribes are also referred to as “O’Odham” which is their name for themselves, as well as their language, and literally means “people.”

3.4.2.1 Consultation Conducted

DOE initiated formal government-to-government consultation in a November 20, 2001, letter (DOE 2001b) sent to tribal governments of the 12 Native American communities/tribes/nations that are likely to have traditional concerns in the area: the Ak-Chin Indian Community, Fort Sill Apache Tribe, Gila River Indian Community, Hopi Tribe, Mescalero Apache Tribe, Pascua Yaqui Tribe, Salt River Pima-Maricopa Indian Community, San Carlos Apache Tribe, Tohono O’Odham Nation, White Mountain Apache Tribe, Yavapai Apache Nation, and the Pueblo of Zuni (listed in Table 3.4–1). As the lead Federal agency on this project, DOE is consulting on behalf of the cooperating agencies, with both official government contacts and delegated cultural resources specialists to maintain the Government-to-Government relationship with Native American tribes in the NEPA process. Tribal consultation is ongoing, and is continued with the designated officials or employees when the tribes undergo personnel changes (SWCA 2002c; as noted in Table 3.4–1).

Seven of the 12 tribes contacted have indicated to DOE representatives that they have concerns about the proposed project and that portions of the project’s Area of Potential Effect (APE) are important to them. These include the Four Southern Tribes, the Hopi Tribe, the Mescalero Apache Tribe, and the Pascua Yaqui Tribe. Consultation is ongoing with all tribes, but the O’Odham tribes and Pascua Yaqui have communicated their concerns in several meetings as well as during site visits on January 23, 2002 and February 4, 2003 (SWCA 2002c). Representatives of the Tohono O’Odham Nation have also met directly with DOE representatives in Washington, DC, to discuss their cultural concerns. Concerns discussed during these site visits and in meetings are presented in Section 3.4.2.2.

Table 3.4–1. Tribal Officials Contacted by DOE in Project Scoping.

Tribes	Name	Title
Ak-Chin Indian Community	Mrs. Delia Carlyle ^a Ms. Elaine Peters Mr. Jon Shumaker ^b	Chairperson Ak-Chin Him Dak Museum Director Tribal Archaeologist
Fort Sill Apache Tribe	Mrs. Ruey Darrow ^c Mr. Michael Darrow	Chairperson Tribal Historian
Gila River Indian Community	Mr. Donald Antone Dr. John Ravesloot Mr. Barnaby Lewis ^d	Governor CulturalResources Coordinator Cultural Resources Specialist
Hopi Tribe	Mr. Wayne Taylor Mr. Leigh Kuwanwisiwma	Chairman Hopi Cultural Preservation Office Director
Mescalero Apache Tribe	Ms. Sara Misqueuz Ms. Donna Stern-McFadden	President Tribal Historic Preservation Officer
Pascua Yaqui Tribe	Mr. Robert Valencia Ms. Amalia Reyes	Chairman Language and Culture Specialist
Salt River Pima-Maricopa Indian Community	Mr. Ivan Makil ^e Mr. Ron Chiago ^f	President Cultural Resources Coordinator
San Carlos Apache Tribe	Mr. Raymond Stanley ^g Ms. Vernelda Grant Mrs. Jeanette Cassa Mr. Seth Pilsk	Chairman Director, Historic Preservation and Archaeology Elders Cultural Advisory Council Ethnobotanist, Assistant to Elders Advisory Council
Tohono O’Odham Nation	Mr. Edward Manuel Mr. Tony Burrell ^h Mr. Peter Steere Mr. Joe Joaquin	Chairman Chairman, Cultural Committee Cultural Affairs Program Manage Cultural Resrouces Specialist and NAGPRA Coordinator
White Mountain Apache Tribe	Mr. Dallas Massey, Sr. Mr. Ramon Riley Dr. John Welch	Chairman Cultural Resources Director Tribal Historic Preservation Officer
Yavapai-Apache Nation	Mr. Aaron Russell Mr. Don Decker	Chairman Director, Apache Cultural Program
Pueblo of Zuni	Mrs. Katherine Marquez Mr. Malcolm Bowekaty ⁱ Dr. Jonathan Damp	Director, Yavapai Cultural Program Governor Tribal Historic Preservation Officer

^a Terry O. Enos replaced Delia Carlyle as Chairman in 2002.

^b Jon Shumaker no longer is employed by the Ak Chin Indian Community (as of July 2002). Nancy Nelson is now Cultural Resource Manager and Deborah Baptisto is Cultural Resources Specialist. Both have been consulted with on this project to follow up previous work with Jon Shumaker.

^c Ruey Darrow is deceased (2002); current chairperson is Jeff Houser.

^d Angela Garcia is now assistant cultural resources specialist and is assisting Barnaby Lewis with consultation on this project, as are other staff members.

^e Ivan Makil is no longer President of the Community; Joni Ramos is the current President (2003).

^f Mr. Chiago is no longer Cultural Resource Manager for the Salt River Pima Maricopa Indian Community. Other staff members, specifically Mr. Gary Gilbert, are communicating the Community’s concerns on this project.

^g Raymond Stanley is no longer Chairman; Kathleen Wesley-Kitcheyan was elected Chairwoman in Fall 2002.

^h Tony Burrell is no longer on the Legislative Council and no longer serves as Chairman of the Cultural Preservation Committee. Mary Flores is now Chair of the Cultural Preservation Committee, and further consultation has been conducted with her, as well as other committee members: Felicia Nuñez, Jerome Joaquin, Emilio Lewis, and Frances Miguel.

ⁱ Malcolm Bowekaty is no longer Governor; Arlen Quetawki, Sr. was elected in Fall 2002.

The Hopi Tribe, on December 4, 2001, requested the opportunity to review both the project EIS and all archaeological inventories prepared for this project (SWCA 2002c). Mescalero Apache Tribe representatives have also stated that they would like to consult further on this project and that they hope to set up a meeting and site visit with USFS Coronado National Forest (SWCA 2002c). The Four Southern Tribes Consulting Group requested further site visits and presentations on the project, and they wish to review all project documents, including all archaeological and cultural resource reports, the Draft and Final EIS, as well as any biological reports prepared that may present information about plants and animals traditionally used by the O'Odham. The Pascua Yaqui Tribe also wishes to be included on future site visits and to review cultural resource reports and the Draft EIS and Final EIS. Dates are pending for continued consultation between the Mescalero and DOE and cooperating agencies, as well as between the O'Odham and DOE and cooperating agencies.

3.4.2.2 Cultural Concerns and Traditional Cultural Properties

Traditional cultural information is often confidential and sensitive, and many tribal representatives are reluctant to divulge information about traditional localities. A lack of response to tribal notification should neither be interpreted as a lack of concern nor an indication that there are no sensitive localities within the proposed project area. The Coronado National Forest has provided a very useful summary of the published literature on O'Odham use of the Forest through which portions of the three proposed corridors would cross (USFS 2002d). This document details the ethnography, occupation, and traditional O'Odham uses of the Tumacacori Uplands region (region including Tumacacori and surrounding higher ground, see Figure 1.1–4), and also references the Apache and Yaqui presence in the Tumacacoris during historic times. O'Odham plant use and the kinds of landmarks that are culturally significant to traditional O'Odham are also very well summarized in this document, and together this provides valuable background for assessing the potential cultural impacts to USFS land in this project.

An issue of concern to all responding tribes is the possibility that project construction would disturb previously undiscovered human remains (SWCA 2002c; USFS 2002d). Procedures for consultation with the tribes regarding unavoidable or unanticipated disturbance of human remains and funerary objects located on non-Federal land in Arizona are specified in amendments to the *Arizona Antiquities Act* (Arizona Revised Statutes [ARS] §41-844 and §41-865). Any remains located on Federal land are subject to the provisions established by NAGPRA, and procedures for handling any discoveries would be specified in a project Memorandum of Agreement and Plan of Action. No discoveries of human remains are expected on this project because care would be taken to minimize archaeological site disturbance through careful location of project facilities.

A second issue of concern is the disturbance of localities or natural features named in traditional stories, the "Cultural Landscape." Some of these localities may also serve as shrine or ritual sites and may still be in use. To date, none of the tribes consulted have identified or named specific localities, natural features, or other landscape features that may be affected by this project, beyond the suggestion that protohistoric O'Odham villages may be impacted (SWCA 2002c). The known locations of these villages are not in any of the proposed project corridors (SWCA 2002c; USFS 2002d) and efforts would be made to identify any previously unknown villages that are located within the proposed corridors. Furthermore, none of the tribes consulted have yet identified stories or oral traditions that may relate to the project area (SWCA 2002c; USFS 2002d). That stated, individual communities often have local interpretations of landscape features, and these sometimes "place widely known creation-time events at local landmarks" (USFS 2002d); only further discussion with American Indian elders is likely to identify oral traditions identifying local landmarks.

Third, a great concern to most responding groups is the natural landscape of the Western Corridor (SWCA 2002c). Because there has been minimal disturbance to this area, the tribes believe that there may

be many previously unrecorded archaeological features within the route's APE, as well as culturally significant plants and animals (SWCA 2002c, USFS 2002d). The undisturbed nature of the Western Corridor is significant to the tribes because it is one of the few areas still existing in southern Arizona where the pre-European contact landscape can be encountered (SWCA 2002c).

The consulted Native American groups recommend avoiding the Western Corridor entirely. They believe construction of the proposed transmission line (including the ROW and access roads) has the potential both to discover cultural resources (prehistoric, historic, or modern) and to adversely impact such resources. Avoidance of both known and newly discovered cultural resources is the mitigation recommended by all responding Native American tribes to date; however, if avoidance is not possible, it would be necessary to develop and implement plans to mitigate potential adverse effects. The O'Odham representatives request that these mitigation plans include both archaeological recovery and an ethnographic cultural landscape study. This evaluation of the cultural landscape would include interviews with elders to enhance the inclusive analyses of geographic landscape features and archaeological/historical data using a geographic information system (GIS) mode of analysis to portray the links between landscape and cultural features.

O'Odham. As described previously, the O'Odham are represented by four modern tribes: the Ak-Chin Indian Community, Gila River Indian Community, Salt River Pima-Maricopa Indian Community, and the Tohono O'Odham Nation. The eastern boundary of the main portion of the Tohono O'Odham Nation is approximately 27 mi (43 km) west of the intersection of the Western Corridor and Arivaca Road (Figure 3.1-1). The southern boundary of the San Xavier District of the Tohono O'Odham Nation, which is not contiguous with the main reservation, is approximately 1.0 mi (1.6 km) north of all three project corridors as they exit the South Substation. The area of O'Odham traditional land use extends east of the Tohono O'Odham Nation boundary across the Santa Cruz and San Pedro River Valleys, and almost to the New Mexico border. All alternative corridors for the project are within O'Odham traditional lands (SWCA 2002c), and the Tohono O'Odham Nation is taking the lead in consultation on behalf of other O'Odham groups because of the proximity of the project to the Tohono O'Odham Nation.

The Tohono O'Odham Nation regards the lands involved in the proposed transmission line corridors as "culturally sensitive since they contain many significant cultural sites including traditional cultural places, archaeological sites, sacred sites, religious sites, plant collection areas for basket materials, and medicines and burial sites" (SWCA 2002c). Background research on the area, though not identifying any specific localities, also suggests that such culturally sensitive localities may occur within the proposed corridors (USFS 2002d). The Tumacacori Uplands support a number of plant taxa that were traditionally important to the O'Odham and many of these are relatively rare in the desert lowlands to the west and north where the majority of O'Odham reservation land is located (SWCA 2002c, USFS 2002d). These taxa include but are not limited to: oaks, agaves, banana yucca, beargrass, walnuts, mulberry, chiltepinos, and sayas (USFS 2002d). Specific information about the location of such places or resources has not yet been provided to DOE by the Tohono O'Odham Nation.

Of the known archaeological sites described in the previous section, none are identified as sacred sites, religious sites, or burial sites (SWCA 2002c, USFS 2002d). Peaks, caves, shrines, burials, rock art sites, and sacred object caches have been recognized as culturally important places to the O'Odham within the greater region (USFS 2002d). Some of these types of places (rock art sites, caves) are present in the Tumacacori Uplands, but their specific cultural significance has not been established (SWCA 2002c, USFS 2002d). Archaeological sites within O'Odham traditional lands are important to the preservation of O'Odham heritage because the sites are the remains of their ancestors (SWCA 2002c, USFS 2002d). Burial areas are considered shrines (SWCA 2002c). Traditionally, rock art panels and *tinajas* (rock tanks in which rain water collects) are also important sites; many are active shrines that are not disclosed to

outsiders. The area known as Tinajas Hills near the Western Corridor and the Sierrita Mountains is particularly important to the O'Odham (SWCA 2002c).

Although archaeological remains are very significant to the O'Odham, they also place high regard and value on native plants and animals, and the natural landscape of their traditional use area (SWCA 2002c, USFS 2002d). All native plants and animals are linked and considered significant in O'Odham tradition (SWCA 2002c, USFS 2002d). "Many authors have noted the close connection between O'Odham religion and the landscape they live in" and "every part of the natural environment is also personified and must be treated with circumspection and respect" (USFS 2002d). O'Odham representatives stated that they do not want plants and animals affected by this project, but they have not yet named species or specific locations in the project areas other than national forest lands. The preservation of relatively undisturbed landscapes similar to those used by the O'Odham prior to European contact is important to the O'Odham, especially in areas where people traditionally collected subsistence foods and lived in villages (SWCA 2002c). According to the NRHP, eligibility of such an ethnographic landscape that does "not contain, or connect, specific special places or landmarks is tenuous at best" (USFS 2002d). Nevertheless, the Tohono O'Odham Nation's preference for undisturbed landscapes gives added weight to the general visual quality concerns.

The Tohono O'Odham Nation is also concerned about the cumulative impacts to both "the cultural and physical landscapes and view sheds of the proposed transmission line corridors, including possible impacts to national forest lands; the Pajarita Wilderness Area, the Goodding Research Natural Area, the riparian zones in Sycamore Canyon and many unique plant and animal species found in the area" (SWCA 2002c). The Pajarita Wilderness, Goodding Research Natural Area, and Sycamore Canyon are shown in Figure 3.1-1.

O'Odham representatives were consulted about a specific published passage regarding the effects of constructions (such as power lines) that disrupt the space between significant landmarks, and thus disrupt the forces that hold the earth together (quoted in USFS 2002d, SWCA 2002c). Further consultation is needed to gauge the depth of this concern and it is likely an issue better considered under the AIRFA rather than under usual NHPA consultations. All issues raised concerning NHPA, AIRFA, as well as all relevant EOs are being evaluated during this NEPA process. Following selection of a preferred alternative, discussion regarding specific mitigation would occur as part of ongoing tribal consultation conducted under NEPA.

O'Odham representatives from all four tribes have stated that they oppose the Western Corridor because it would affect a relatively pristine area and it may also affect archaeological sites and possibly culturally-sensitive sites as well (SWCA 2002c). No specific traditional cultural properties (TCPs) have been identified along the proposed corridors to date. All comments have been made during telephone conversations, meetings, site visits, or in a submitted letter (SWCA 2002c).

Pascua Yaqui. The Pascua Yaqui have deep ties to both the Western and Central Corridors because these areas were used by their ancestors during their wide-ranging food-gathering excursions in the distant past. More recently, during the 1889-1921 Mexican Wars (sometimes referred to as the "Yaqui Wars"), direct ancestors of the Pascua Yaqui traveled through this corridor of land between Nogales and Tucson as they fled political persecution. Traveling near and along the Santa Cruz River, the Yaqui refugees-turned-immigrants also transported guns and ammunition to their relatives struggling against the Mexican government. Many of these refugees bore wounds, and it is likely that some died and were buried in the countryside. The Pascua Yaqui Tribe considers these Yaqui burials and campsites as TCPs. During consultation on this project, Yaqui representatives stated that some TCPs may be located along project corridors, but none have been specifically identified to date (SWCA 2002c). If any are

encountered in the project area, these sites must be evaluated for inclusion in the NRHP and discussed as part of compliance with the NHPA.

No specific Yaqui TCPs have yet been identified along this or any of the proposed corridors by representatives of the Pascua Yaqui tribe. All comments from the Pascua Yaqui tribe have been made during telephone conversations or the January 2002 site visit.

Hopi. The Hopi view archaeological sites as proof of their oral traditions, specifically as evidence of their Covenant of Natwani. Sacred Hopi oral traditions describe migrations of many clans to the Hopi mesas from all directions prior to the arrival of Euro-Americans in Arizona. A distinct and significant area named in Hopi traditional history is referred to as Palatkwapi, located to the south of present-day Hopi reservation. Some believe that Palatkwapi is in southeastern Arizona. Because of the importance of archaeological remains to Hopi culture and religion, the Hopi wish to be informed about any disturbances to archaeological materials or human remains encountered on the proposed project. Hopi representatives have stated that all archaeological sites eligible for the NHRP are of cultural importance and are potentially Hopi TCPs. To date, the Hopi tribe has not specifically identified any Hopi TCPs within the proposed project area. All comments have been made in either telephone calls or in the submitted letter (SWCA 2002c).

Apache and Yavapai. The Fort Sill Apache Tribe, San Carlos Apache Tribe, White Mountain Apache Tribe, and Yavapai-Apache Nation have not yet stated their cultural concerns in response to requests for consultation, nor have they expressed their intention to consult on this project. The Mescalero Apache Tribe wishes to consult on this project because it is concerned about the project's impacts on their heritage sites (SWCA 2002c).

Zuni. No response to the DOE letter, or follow-up telephone calls, has yet been received from the Pueblo of Zuni.